

WHAT IS CLAIMED IS:

1. A stream converting method, characterized in that it comprises the steps of:

separating a first transport stream (TS) into a first TS
5 packet string formed from TS packets that have a prescribed packet identifier and a second TS packet string formed from TS packets that do not have the prescribed packet identifier;

converting a bit rate of the first TS packet string so as to produce a third TS packet string; and

10 multiplexing the produced third TS packet string and the second TS packet string so as to produce a second transport stream.

2. The stream converting method according to claim 1,
15 characterized in that the prescribed packet identifier is a packet identifier of at least one of video data and audio data.

3. The stream converting method according to claim 1,
20 characterized in that it comprises the steps of:

extracting reference time information from the first transport stream so as to produce reference time from the reference time information;

determining, with reference to the reference time, time
25 of receipt of a TS packet including a head byte of a PES

multiplexing the produced third TS packet string and the second TS packet string so as to produce a second transport stream;

extracting reference time information from the first
5 transport stream, and delaying reference time represented by the reference time information by a prescribed time so as to produce delayed reference time; and

determining, with reference to the delayed reference time, time of receipt of each TS packet forming the second
10 transport stream, and recording the second transport stream together with the determined time of receipt onto a recording medium.

5. A stream recording method, characterized in that it
15 comprises the steps of:

selecting TS packets other than TS packets having a prescribed packet identifier from a first transport stream so as to output the selected TS packets as a second transport stream;

20 extracting reference time information from the first transport stream so as to produce reference time from the reference time information; and

determining, with reference to the reference time, time of receipt of each TS packet forming the second transport
25 stream, and recording the second transport stream together

with the determined time of receipt onto a recording medium.

6. The stream recording method according to claim 4 or 5,
characterized in that the prescribed packet identifier is a
5 packet identifier of at least one of video data and audio
data.

7. The stream recording method according to claim 4 or 5,
characterized in that the recording medium is an optical disk.

8. A stream converting apparatus, characterized in that
it comprises:

a packet separating section for separating a first
transport stream into a first TS packet string formed from TS
15 packets that have a prescribed packet identifier and a second
TS packet string formed from TS packets that do not have the
prescribed packet identifier;

a bit-rate converting section for converting a bit rate
of the first TS packet string so as to produce a third TS
20 packet string; and

a packet multiplexing section for multiplexing the third
TS packet string output from the bit-rate converting section
and the second TS packet string output from the packet
separating section so as to produce a second transport stream.

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9. A stream recording apparatus, characterized in that it comprises:

5 a packet separating section for separating a first transport stream into a first TS packet string formed from TS packets that have a prescribed packet identifier and a second TS packet string formed from TS packets that do not have the prescribed packet identifier;

10 a bit-rate converting section for converting a bit rate of the first TS packet string so as to produce a third TS packet string;

15 a packet multiplexing section for multiplexing the third TS packet string output from the bit-rate converting section and the second TS packet string output from the packet separating section so as to produce a second transport stream;

a means for extracting reference time information from the first transport stream, and delaying reference time represented by the reference time information by a prescribed time so as to produce delayed reference time; and

20 a recording control section for determining, with reference to the delayed reference time, time of receipt of each TS packet forming the second transport stream, and recording the second transport stream together with the determined time of receipt onto a recording medium.

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10. A stream recording apparatus, characterized in that it comprises:

a packet selecting section for selecting TS packets other than TS packets having a prescribed packet identifier from a first transport stream so as to output the selected TS packets as a second transport stream;

a means for extracting reference time information from the first transport stream so as to produce reference time from the reference time information; and

a recording control section for determining, with reference to the reference time, time of receipt of each TS packet forming the second transport stream, and recording the second transport stream together with the determined time of receipt onto a recording medium.

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